## CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims

1.      (Currently Amended) A method of providing secure network management communications within a communication network, the communication network including a plurality of network elements each adapted to generate and process legacy network management messages in conformance with a legacy management system, the method comprising ~~the steps of~~:

embedding a first legacy network management message within a first Simple Network Management Protocol (SNMP) message at a first network element;

transmitting the first SNMP message over the network to a second network element; [[and]]

extracting the first legacy network management message from the first SNMP message at the second network element; and

transmitting the extracted first legacy network management message to a legacy agent.


2.      (Currently Amended) The method of claim 1, further comprising: ~~wherein the step of transmitting the first SNMP message comprises~~

transmitting the first SNMP message in conformance with a secure version of the SNMP.

3.    (Currently Amended) The method of claim 2, further comprising: ~~wherein the step of transmitting the first SNMP message comprises~~

transmitting the first SNMP message in conformance with SNMP version 3 (SNMPv3).

4.    (Currently Amended) The method of claim 1, wherein the legacy management system provides less security than the SNMP.

5.    (Currently Amended) The method of claim 1, further comprising ~~the further steps of~~:

generating the first legacy network management message at the first network element; and

processing the generated first legacy network management message at the second network element.

6.    (Currently Amended) The method of claim 5, further comprising ~~the further steps of~~:

generating a second legacy network management message at the second network element in response to the first legacy network management message;

embedding the <u>generated</u> second legacy network management message within a second SNMP message at the second network element;

transmitting the second SNMP message over the network to the first network element; [[and]]

extracting the second legacy network management message from the second SNMP message at the first network element<u>; and</u>

<u>transmitting the extracted second legacy network management message to a legacy agent.</u>


7.    (Currently Amended) The method of claim 1<u>,</u> wherein the first network element is a management station, and ~~wherein~~ the second network element is a node.


8.    (Currently Amended) The method of claim 1<u>,</u> wherein the first network element is a node, and ~~wherein~~ the second network element is a management station.

9. (Currently Amended) A network management system within a communication network, the communication network including a management station and a node, comprising:

a legacy interface at the management station for generating a first legacy network management message in conformance with a legacy network management protocol;

a Simple Network Management Protocol (SNMP) initiator at the management station for embedding the first legacy network management message within a first SNMP message and for transmitting the first SNMP message to the node;

an SNMP agent at the node for receiving the first SNMP message and for extracting the first legacy network management message from the first SNMP message; and

a legacy agent at the node for processing the extracted first legacy network management message in conformance with the legacy network management protocol.

10. (Currently Amended) The network management system of claim 9, wherein the SNMP initiator is adapted to transmit the first SNMP message in conformance with a secure version of the SNMP.

11.    (Currently Amended) The network management system of claim 10, wherein the SNMP initiator is adapted to transmit the first SNMP message in conformance with SNMP version 3 (SNMPv3).


12.    (Currently Amended) The network management system of claim 9, wherein the legacy network management protocol provides less security than the SNMP.


13.    (Currently Amended) A Simple Network Management Protocol (SNMP) initiator at a management station within a communication network, the SNMP initiator comprising:

    instructions for receiving a legacy network management message which conforms to a legacy network management protocol;

    instructions for embedding the received legacy network management message within an SNMP message; [[and]]

    instructions for transmitting the SNMP message to a node within the communication network;

    instructions for extracting the legacy network management message from the SNMP message; and

instructions for transmitting the extracted legacy network management message to a legacy agent.

14.     (Currently Amended) The SNMP initiator of claim 13, wherein the legacy network management protocol provides less security than the SNMP.

15.     (Currently Amended) A Simple Network Management Protocol (SNMP) agent at a node within a communication network, the SNMP agent comprising:

instructions for receiving a first SNMP message from a management station within a communication network;

instructions for extracting a first legacy network management message from the received first SNMP message, the first legacy network management message conforming to a legacy network management protocol; and

instructions for sending the extracted first legacy network management message to a legacy agent at the node.

16.     (Currently Amended) The SNMP agent of claim 15, wherein the legacy network management protocol provides less security than the SNMP.

17.     (Currently Amended) The SNMP agent of claim 15, further comprising:

instructions for receiving a second legacy network management message from the legacy agent;

instructions for embedding the <u>received</u> second legacy network management message within a second SNMP message; and

instructions for transmitting the second SNMP message to the management station.


18.     (Currently Amended) The SNMP agent of claim 17, wherein the legacy network management protocol provides less security than <u>the</u> SNMP.